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(FILE 'HOME' ENTERED AT 11:58:10 ON 10 NOV 2003)

FILE 'REGISTRY' ENTERED AT 12:01:06 ON 10 NOV 2003

L1 1846 SEA (BA AND CO AND FE AND O)/ELF  
L2 61 SEA (BI AND O)/ELF AND (2/ELC.SUB)  
L3 349 SEA (V AND O)/ELF AND (2/ELC.SUB)  
L4 37 SEA (PB AND O)/ELF AND (2/ELC.SUB)  
L5 69 SEA (B AND O)/ELF AND (2/ELC.SUB)  
L6 21 SEA (LI AND F)/ELF AND (2/ELC.SUB)  
L7 10 SEA (CA AND F)/ELF AND (2/ELC.SUB)

FILE 'CAPLUS' ENTERED AT 12:06:36 ON 10 NOV 2003

L8 32769 SEA L2 OR L3 OR L4 OR L5 OR L6 OR L7  
L9 36 SEA L1 AND L8  
D 1-36 IALL

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 NOV 2003 HIGHEST RN 614715-63-8  
DICTIONARY FILE UPDATES: 9 NOV 2003 HIGHEST RN 614715-63-8

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

FILE CAPLUS

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FILE COVERS 1907 - 10 Nov 2003 VOL 139 ISS 20  
FILE LAST UPDATED: 9 Nov 2003 (20031109/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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ANSWER 19 OF 36 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2000:280290 CAPLUS  
 DOCUMENT NUMBER: 132:267137  
 TITLE: Manufacture of planar hexagonal ferrite by  
 modification of oxide at low-sintering temperature  
 INVENTOR(S): Zhang, Hongguo; Zhang, Yaoxi; Zhou, Ji; Yue, Zhenxin;  
 Gui, Zhilun; Li, Longtu  
 PATENT ASSIGNEE(S): Qinghua University, Peop. Rep. China  
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 6 pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 INT. PATENT CLASSIF.:  
 MAIN: C01G049-02  
 SECONDARY: H01F001-10  
 CLASSIFICATION: 49-3 (Industrial Inorganic Chemicals)  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1208020	A	19990217	CN 1998-117800	19980918
PRIORITY APPLN. INFO.:			CN 1998-117800	19980918

# ABSTRACT:

The low-temp. sintered planar hexagonal ferrite  $(\text{Co}_{2-x-y}\text{Zn}_x\text{Cu}_y)\text{Fe}_{24-\delta}\text{O}_{41}$  where  $0.1 \leq x \leq 1$ ,  $0.1 \leq y \leq 0.8$ ,  $0.1 \leq \delta \leq 2$  is manufd. by modification of pure  $\text{Co}_2\text{Z}$  compd. such as  $\text{Ba}_3\text{Co}_2\text{Fe}_{24}\text{O}_{41}$  with  $\text{CuO}$ , and/or mixt. of  $\text{CuO}$  and  $\text{ZnO}$ . The process comprises mixing anal.-grade  $\text{Fe}_2\text{O}_3$ ,  $\text{Co}_2\text{O}_3$ ,  $\text{BaCO}_3$ ,  $\text{CuO}$  and  $\text{ZnO}$ , ball-milling the mixt. in ethanol for 12-24 h and sieving to <60-120 mesh, heating the mixt. to 1000-1200.degree. at a heating rate of 2-10 .degree.C/min and sintering for 2-5 h to obtain pre-sintered powder, ball-milling the sintered powder in the presence of 0-4%  $\text{Bi}_2\text{O}_3$  or  $\text{V}_2\text{O}_5$  for 24-72 h; drying and adding 4-7% PVA soln. 6-10%; sieving to <60-120 mesh, granulating and molding, and heating to 800-950.degree. at 2-10 .degree.C/min and sintering for 4-8 h. The ferrites having the formula of  $\text{Ba}_3\text{Co}_{1.8}\text{Cu}_{0.2}\text{Fe}_{23.6}\text{O}_{41}$ ,  $\text{Ba}_3\text{Co}_{1.4}\text{Zn}_{0.4}\text{Cu}_{0.2}\text{Fe}_{23.6}\text{O}_{41}$ , or  $\text{Ba}_3\text{Co}_{1.2}\text{Zn}_{0.4}\text{Cu}_{0.4}\text{Fe}_{23.6}\text{O}_{41}$  are manufd.

SUPPL. TERM: ferrite planar hexagonal oxide; barium cobalt zinc copper iron oxide  
 INDEX TERM: Ferrites  
 ROLE: IMF (Industrial manufacture); PREP (Preparation)  
 (planar hexagonal; manuf. of planar hexagonal ferrite by modification of oxide at low-sintering temp.)  
 INDEX TERM: 263411-66-1P, Barium cobalt copper iron oxide  
 ( $\text{Ba}_3\text{Co}_{1.8}\text{Cu}_{0.2}\text{Fe}_{23.6}\text{O}_{41}$ ) 263411-67-2P, Barium cobalt copper iron zinc oxide ( $\text{Ba}_3\text{Co}_{1.4}\text{Cu}_{0.2}\text{Fe}_{23.6}\text{Zn}_{0.4}\text{O}_{41}$ )  
 263411-68-3P, Barium cobalt copper iron zinc oxide  
 ( $\text{Ba}_3\text{Co}_{1.2}\text{Cu}_{0.4}\text{Fe}_{23.6}\text{Zn}_{0.4}\text{O}_{41}$ )  
 ROLE: IMF (Industrial manufacture); PREP (Preparation)  
 (manuf. of planar hexagonal ferrite by modification of oxide at low-sintering temp.)  
 INDEX TERM: 12009-65-3, Barium cobalt iron oxide ( $\text{Ba}_3\text{Co}_2\text{Fe}_{24}\text{O}_{41}$ )  
 ROLE: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (manuf. of planar hexagonal ferrite by modification of oxide at low-sintering temp.)  
 INDEX TERM: 513-77-9, Barium carbonate 1308-04-9, Cobalt oxide  $\text{Co}_2\text{O}_3$   
 1309-37-1, Ferric oxide, reactions  
 ROLE: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)  
 (manuf. of planar hexagonal ferrite by modification of oxide at low-sintering temp.)  
 INDEX TERM: 1304-76-3, Bismuth oxide  $\text{Bi}_2\text{O}_3$ , uses 1314-13-2, Zinc oxide, uses 1314-62-1, Vanadium oxide  $\text{V}_2\text{O}_5$ , uses 1317-38-0, Copper oxide  $\text{CuO}$ , uses  
 ROLE: TEM (Technical or engineered material use); USES (Uses)

ANSWER 21 OF 36 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1997:475594 CAPLUS  
 DOCUMENT NUMBER: 127:103361  
 TITLE: Ceramic magnetic material for microwave use and high-frequency circuit component using it  
 INVENTOR(S): Inoue, Osamu; Sato, Toshifumi; Furukawa, Hirotaka; Hiramoto, Masayoshi; Takeuchi, Takayuki; Matsukawa, Nozomi  
 PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 INT. PATENT CLASSIF.:  
 MAIN: H01F001-34  
 SECONDARY: C01G049-00; C04B035-26  
 CLASSIFICATION: 77-8 (Magnetic Phenomena)  
 Section cross-reference(s): 57  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09167703	A2	19970624	JP 1995-326779	19951215
PRIORITY APPLN. INFO.:			JP 1995-326779	19951215

ABSTRACT:  
 In the material, a main magnetic phase is a hexagonal ferrite contg. .gtoreq.1 alk. earth metal, Fe, O, and Pb or Cu. The material may contain 0-10 (.noteq. 0) wt.% V2O5, CuO, Bi2O3, MoO3, WO3, and/or PbO as a sub-component. In the material, the main phase may be a hexagonal ferrite contg. .gtoreq.1 alk. earth metal, Fe, and O. The circuit component using the material is also claimed. The ferrite can be sintered at low temp.

SUPPL. TERM: magnetic ceramic high frequency circuit component; alk earth metal ferrite magnetic ceramic; ceramic magnetic ferrite microwave

INDEX TERM: Ferrites  
 ROLE: DEV (Device component use); USES (Uses)  
 (alk. earth metal-contg.; ferrite ceramic magnetic material with good low-temp. sinterability for high-frequency circuit component)

INDEX TERM: Electric filters  
 Microwave devices  
 (ferrite ceramic magnetic material with good low-temp. sinterability for high-frequency circuit component)

INDEX TERM: Electric coils  
 ROLE: DEV (Device component use); USES (Uses)  
 (ferrite ceramic magnetic material with good low-temp. sinterability for high-frequency circuit component)

INDEX TERM: Electric circuits  
 (high-frequency; ferrite ceramic magnetic material with good low-temp. sinterability for high-frequency circuit component)

INDEX TERM: 1304-76-3, Bismuth oxide (Bi2O3), processes  
 1313-27-5, Molybdenum oxide (MoO3), processes 1314-35-8, Tungsten oxide (WO3), processes 1314-62-1, Vanadium oxide (V2O5), processes 1317-36-8, Lead oxide (PbO), processes 1317-38-0, Copper oxide (CuO), processes  
 ROLE: DEV (Device component use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)  
 (additive; ferrite ceramic magnetic material with good low-temp. sinterability for high-frequency circuit component)

INDEX TERM: 12009-65-3P, Barium cobalt iron oxide  
 (Ba3Co2Fe24O41) 12258-58-1P, Barium copper iron oxide  
 (Ba3Cu2Fe24O41) 12777-42-3P, Barium iron lead oxide  
 192134-33-1P, Barium cobalt iron vanadium oxide  
 192134-34-2P, Barium bismuth cobalt iron oxide

192134-35-3P, Barium cobalt iron molybdenum oxide  
 192134-36-4P, Barium cobalt iron tungsten oxide  
 192134-37-5P 192134-38-6P  
 192134-39-7P 192134-40-0P  
 192134-41-1P 192134-42-2P  
 192134-43-3P 192134-44-4P  
 192134-47-7P 192134-49-9P, Barium iron vanadium  
 oxide 192134-51-3P, Barium bismuth iron oxide  
 192134-53-5P, Barium iron molybdenum oxide 192134-55-7P,  
 Barium iron tungsten oxide 192134-56-8P, Barium iron lead  
 vanadium oxide 192134-57-9P, Barium bismuth iron lead  
 oxide 192134-58-0P, Barium iron lead molybdenum oxide  
 192134-59-1P, Barium iron lead tungsten oxide  
 192134-60-4P, Barium cobalt iron lead vanadium oxide  
 192134-61-5P, Barium bismuth cobalt iron lead oxide  
 192134-62-6P, Barium cobalt iron lead molybdenum  
 oxide 192134-63-7P, Barium cobalt iron lead  
 tungsten oxide 192134-64-8P, Barium cobalt copper  
 iron vanadium oxide 192134-65-9P, Barium bismuth  
 cobalt copper iron oxide 192134-66-0P  
 192134-67-1P, Barium cobalt copper iron tungsten  
 oxide 192134-68-2P 192134-69-3P  
 192134-70-6P 192134-71-7P  
 192134-72-8P, Barium cobalt copper iron oxide  
 (Ba<sub>3</sub>Co<sub>1.9</sub>Cu<sub>0.1</sub>Fe<sub>24</sub>O<sub>41</sub>) 192134-73-9P, Barium cobalt  
 copper iron oxide (Ba<sub>3</sub>Co<sub>1.7</sub>Cu<sub>0.3</sub>Fe<sub>24</sub>O<sub>41</sub>)  
 192134-74-0P, Barium cobalt copper iron oxide  
 (Ba<sub>3</sub>Co<sub>1.5</sub>Cu<sub>0.5</sub>Fe<sub>24</sub>O<sub>41</sub>) 192134-75-1P, Barium cobalt  
 copper iron oxide (Ba<sub>3</sub>CoCuFe<sub>24</sub>O<sub>41</sub>) 192134-76-2P,  
 Barium cobalt copper iron oxide (Ba<sub>3</sub>Co<sub>0.5</sub>Cu<sub>1.5</sub>Fe<sub>24</sub>O<sub>41</sub>)  
 192134-77-3P, Barium cobalt iron lead oxide  
 (Ba<sub>2.9</sub>Co<sub>2</sub>Fe<sub>24</sub>Pb<sub>0.1</sub>O<sub>41</sub>) 192134-78-4P, Barium cobalt  
 copper iron lead oxide (Ba<sub>2.9</sub>Co<sub>1.9</sub>Cu<sub>0.1</sub>Fe<sub>24</sub>Pb<sub>0.1</sub>O<sub>41</sub>)  
 192134-79-5P, Barium cobalt copper iron lead oxide  
 (Ba<sub>2.9</sub>Co<sub>1.7</sub>Cu<sub>0.3</sub>Fe<sub>24</sub>Pb<sub>0.1</sub>O<sub>41</sub>) 192134-80-8P, Barium  
 cobalt copper iron lead oxide (Ba<sub>2.9</sub>Co<sub>1.5</sub>Cu<sub>0.5</sub>Fe<sub>24</sub>Pb<sub>0.1</sub>O<sub>41</sub>)  
 192134-81-9P, Barium cobalt copper iron lead oxide  
 (Ba<sub>2.9</sub>CoCuFe<sub>24</sub>Pb<sub>0.1</sub>O<sub>41</sub>) 192134-82-0P, Barium  
 cobalt copper iron lead oxide (Ba<sub>2.9</sub>Co<sub>0.5</sub>Cu<sub>1.5</sub>Fe<sub>24</sub>Pb<sub>0.1</sub>O<sub>41</sub>)  
 192134-83-1P, Barium copper iron lead oxide  
 (Ba<sub>2.9</sub>Cu<sub>2</sub>Fe<sub>24</sub>Pb<sub>0.1</sub>O<sub>41</sub>) 192134-84-2P, Barium cobalt  
 iron lead oxide (Ba<sub>2.7</sub>Co<sub>2</sub>Fe<sub>24</sub>Pb<sub>0.3</sub>O<sub>41</sub>) 192134-85-3P  
 , Barium cobalt copper iron lead oxide  
 (Ba<sub>2.7</sub>Co<sub>1.9</sub>Cu<sub>0.1</sub>Fe<sub>24</sub>Pb<sub>0.3</sub>O<sub>41</sub>) 192134-86-4P, Barium  
 cobalt copper iron lead oxide (Ba<sub>2.7</sub>Co<sub>1.7</sub>Cu<sub>0.3</sub>Fe<sub>24</sub>Pb<sub>0.3</sub>O<sub>41</sub>)  
 192134-87-5P, Barium cobalt copper iron lead oxide  
 (Ba<sub>2.7</sub>Co<sub>1.5</sub>Cu<sub>0.5</sub>Fe<sub>24</sub>Pb<sub>0.3</sub>O<sub>41</sub>) 192134-88-6P, Barium  
 cobalt copper iron lead oxide (Ba<sub>2.7</sub>CoCuFe<sub>24</sub>Pb<sub>0.3</sub>O<sub>41</sub>)  
 192134-89-7P, Barium cobalt copper iron lead oxide  
 (Ba<sub>2.7</sub>Co<sub>0.5</sub>Cu<sub>1.5</sub>Fe<sub>24</sub>Pb<sub>0.3</sub>O<sub>41</sub>) 192134-90-0P, Barium copper  
 iron lead oxide (Ba<sub>2.7</sub>Cu<sub>2</sub>Fe<sub>24</sub>Pb<sub>0.3</sub>O<sub>41</sub>) 192134-91-1P  
 , Barium cobalt iron lead oxide (Ba<sub>2.5</sub>Co<sub>2</sub>Fe<sub>24</sub>Pb<sub>0.5</sub>O<sub>41</sub>)  
 192134-92-2P, Barium cobalt copper iron lead oxide  
 (Ba<sub>2.5</sub>Co<sub>1.9</sub>Cu<sub>0.1</sub>Fe<sub>24</sub>Pb<sub>0.5</sub>O<sub>41</sub>) 192134-93-3P, Barium  
 cobalt copper iron lead oxide (Ba<sub>2.5</sub>Co<sub>1.7</sub>Cu<sub>0.3</sub>Fe<sub>24</sub>Pb<sub>0.5</sub>O<sub>41</sub>)  
 192134-94-4P, Barium cobalt copper iron lead oxide  
 (Ba<sub>2.5</sub>Co<sub>1.5</sub>Cu<sub>0.5</sub>Fe<sub>24</sub>Pb<sub>0.5</sub>O<sub>41</sub>) 192134-95-5P, Barium  
 cobalt copper iron lead oxide (Ba<sub>2.5</sub>CoCuFe<sub>24</sub>Pb<sub>0.5</sub>O<sub>41</sub>)  
 192134-96-6P, Barium cobalt copper iron lead oxide  
 (Ba<sub>2.5</sub>Co<sub>0.5</sub>Cu<sub>1.5</sub>Fe<sub>24</sub>Pb<sub>0.5</sub>O<sub>41</sub>) 192134-97-7P, Barium copper  
 iron lead oxide (Ba<sub>2.5</sub>Cu<sub>2</sub>Fe<sub>24</sub>Pb<sub>0.5</sub>O<sub>41</sub>) 192134-98-8P  
 , Barium cobalt iron lead oxide (Ba<sub>2</sub>Co<sub>2</sub>Fe<sub>24</sub>PbO<sub>41</sub>)  
 192134-99-9P, Barium cobalt copper iron lead oxide  
 (Ba<sub>2</sub>Co<sub>1.9</sub>Cu<sub>0.1</sub>Fe<sub>24</sub>PbO<sub>41</sub>) 192135-00-5P, Barium  
 cobalt copper iron lead oxide (Ba<sub>2</sub>Co<sub>1.7</sub>Cu<sub>0.3</sub>Fe<sub>24</sub>PbO<sub>41</sub>)  
 192135-02-7P, Barium cobalt copper iron lead oxide  
 (Ba<sub>2</sub>Co<sub>1.5</sub>Cu<sub>0.5</sub>Fe<sub>24</sub>PbO<sub>41</sub>) 192135-04-9P, Barium  
 cobalt copper iron lead oxide (Ba<sub>2</sub>CoCuFe<sub>24</sub>PbO<sub>41</sub>)  
 192135-05-0P, Barium cobalt copper iron lead oxide

(Ba<sub>2</sub>Co<sub>0.5</sub>Cu<sub>1.5</sub>Fe<sub>24</sub>PbO<sub>41</sub>) 192135-06-1P, Barium copper iron lead oxide (Ba<sub>2</sub>Cu<sub>2</sub>Fe<sub>24</sub>PbO<sub>41</sub>) **192135-07-2P**, Barium cobalt iron lead oxide (Ba<sub>1.5</sub>Co<sub>2</sub>Fe<sub>24</sub>Pb<sub>1.5</sub>O<sub>41</sub>) **192135-08-3P**, Barium cobalt copper iron lead oxide (Ba<sub>1.5</sub>Co<sub>1.9</sub>Cu<sub>0.1</sub>Fe<sub>24</sub>Pb<sub>1.5</sub>O<sub>41</sub>) **192135-09-4P**, Barium cobalt copper iron lead oxide (Ba<sub>1.5</sub>Co<sub>1.7</sub>Cu<sub>0.3</sub>Fe<sub>24</sub>Pb<sub>1.5</sub>O<sub>41</sub>) **192135-10-7P**, Barium cobalt copper iron lead oxide (Ba<sub>1.5</sub>Co<sub>1.5</sub>Cu<sub>0.5</sub>Fe<sub>24</sub>Pb<sub>1.5</sub>O<sub>41</sub>) **192135-11-8P**, Barium cobalt copper iron lead oxide (Ba<sub>1.5</sub>CoCuFe<sub>24</sub>Pb<sub>1.5</sub>O<sub>41</sub>) **192135-12-9P**, Barium cobalt copper iron lead oxide (Ba<sub>1.5</sub>Co<sub>0.5</sub>Cu<sub>1.5</sub>Fe<sub>24</sub>Pb<sub>1.5</sub>O<sub>41</sub>) 192135-13-0P, Barium copper iron lead oxide (Ba<sub>1.5</sub>Cu<sub>2</sub>Fe<sub>24</sub>Pb<sub>1.5</sub>O<sub>41</sub>) **192135-14-1P**, Barium cobalt iron lead oxide (BaCo<sub>2</sub>Fe<sub>24</sub>Pb<sub>2</sub>O<sub>41</sub>) **192135-15-2P**, Barium cobalt copper iron lead oxide (BaCo<sub>1.9</sub>Cu<sub>0.1</sub>Fe<sub>24</sub>Pb<sub>2</sub>O<sub>41</sub>) **192135-16-3P**, Barium cobalt copper iron lead oxide (BaCo<sub>1.7</sub>Cu<sub>0.3</sub>Fe<sub>24</sub>Pb<sub>2</sub>O<sub>41</sub>) **192135-17-4P**, Barium cobalt copper iron lead oxide (BaCo<sub>1.5</sub>Cu<sub>0.5</sub>Fe<sub>24</sub>Pb<sub>2</sub>O<sub>41</sub>) **192135-18-5P**, Barium cobalt copper iron lead oxide (BaCoCuFe<sub>24</sub>Pb<sub>2</sub>O<sub>41</sub>) **192135-20-9P**, Barium cobalt copper iron lead oxide (BaCo<sub>0.5</sub>Cu<sub>1.5</sub>Fe<sub>24</sub>Pb<sub>2</sub>O<sub>41</sub>) 192135-21-0P, Barium copper iron lead oxide (BaCu<sub>2</sub>Fe<sub>24</sub>Pb<sub>2</sub>O<sub>41</sub>) **192135-22-1P**, Barium cobalt iron lead strontium oxide (Ba<sub>1.5</sub>Co<sub>2</sub>Fe<sub>24</sub>PbSr<sub>0.5</sub>O<sub>41</sub>) **192135-23-2P 192135-24-3P 192135-25-4P 192135-26-5P 192135-27-6P** 192135-28-7P, Barium copper iron lead strontium oxide (Ba<sub>1.5</sub>Cu<sub>2</sub>Fe<sub>24</sub>PbSr<sub>0.5</sub>O<sub>41</sub>) **192135-29-8P**, Barium cobalt iron lead strontium oxide (BaCo<sub>2</sub>Fe<sub>24</sub>PbSrO<sub>41</sub>) **192135-30-1P 192135-31-2P 192135-32-3P 192135-33-4P 192135-34-5P** 192135-35-6P, Barium copper iron lead strontium oxide (BaCu<sub>2</sub>Fe<sub>24</sub>PbSrO<sub>41</sub>) **192135-36-7P**, Barium cobalt iron lead strontium oxide (Ba<sub>0.5</sub>Co<sub>2</sub>Fe<sub>24</sub>PbSr<sub>1.5</sub>O<sub>41</sub>) **192135-37-8P 192135-38-9P 192135-39-0P 192135-40-3P 192135-41-4P** 192135-42-5P, Barium copper iron lead strontium oxide (Ba<sub>0.5</sub>Cu<sub>2</sub>Fe<sub>24</sub>PbSr<sub>1.5</sub>O<sub>41</sub>) 192135-43-6P, Cobalt iron lead strontium oxide (Co<sub>2</sub>Fe<sub>24</sub>PbSr<sub>2</sub>O<sub>41</sub>) 192135-44-7P, Cobalt copper iron lead strontium oxide (Co<sub>1.9</sub>Cu<sub>0.1</sub>Fe<sub>24</sub>PbSr<sub>2</sub>O<sub>41</sub>) 192135-45-8P, Cobalt copper iron lead strontium oxide (Co<sub>1.7</sub>Cu<sub>0.3</sub>Fe<sub>24</sub>PbSr<sub>2</sub>O<sub>41</sub>) 192135-46-9P, Cobalt copper iron lead strontium oxide (Co<sub>1.5</sub>Cu<sub>0.5</sub>Fe<sub>24</sub>PbSr<sub>2</sub>O<sub>41</sub>) 192135-47-0P, Cobalt copper iron lead strontium oxide (CoCuFe<sub>24</sub>PbSr<sub>2</sub>O<sub>41</sub>) 192135-49-2P, Cobalt copper iron lead strontium oxide (Co<sub>0.5</sub>Cu<sub>1.5</sub>Fe<sub>24</sub>PbSr<sub>2</sub>O<sub>41</sub>) 192135-51-6P, Copper iron lead strontium oxide (Cu<sub>2</sub>Fe<sub>24</sub>PbSr<sub>2</sub>O<sub>41</sub>)  
 ROLE: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)  
 (ferrite ceramic magnetic material with good low-temp. sinterability for high-frequency circuit component)

ANSWER 17 OF 36 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2001:750912 CAPLUS  
 DOCUMENT NUMBER: 136:30618  
 TITLE: Study of low-temperature sintering Z-type hexaferrites  
 AUTHOR(S): Zhang, H. G.; Zhou, J.; Yue, Z. X.; Gui, Z. L.; Li, L. T.  
 CORPORATE SOURCE: State Key Lab of New Ceramics and Fine Processing, Tsinghua University, Beijing, 100084, Peop. Rep. China  
 SOURCE: Proceedings of the China International Conference on High-Performance Ceramics, 1st, Beijing, China, Oct. 31-Nov. 3, 1998 (1999), Meeting Date 1998, 360-362. Editor(s): Yan, Dongsheng; Guan, Zhenduo. Tsinghua University Press: Beijing, Peop. Rep. China. CODEN: 69BWTP  
 DOCUMENT TYPE: Conference  
 LANGUAGE: English  
 CLASSIFICATION: 77-3 (Magnetic Phenomena)  
 ABSTRACT: The compn. of Ba<sub>3</sub>Co<sub>2</sub>-x-yZn<sub>x</sub>Cu<sub>y</sub>Fe<sub>23</sub>-.delta.O<sub>41</sub> Z-type hexaferrites was studied. By modifying with CuO, ZnO and doping with suitable amt. of Bi<sub>2</sub>O<sub>3</sub>, low-temp. sintered Z-type hexaferrites with excellent magnetic properties can be obtained. The stability range of sintering temp. of this kind of ferrites is narrow, only between 840-950.degree., but its sintering properties, such as porosity, d. and grain size et al. are improved. Micro-structural and morphol. anal. were carried out by XRD and SEM.  
 SUPPL. TERM: barium cobalt copper zinc hexaferrite; magnetism barium cobalt copper zinc hexaferrite  
 INDEX TERM: Density  
 Dielectric constant  
 Grain size  
 Magnetic permeability  
 Porosity  
 Sintering  
 Thermal stability  
 (properties of barium cobalt copper zinc hexaferrites sintered at low temps.)  
 INDEX TERM: Hexaferrites  
 ROLE: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (properties of barium cobalt copper zinc hexaferrites sintered at low temps.)  
 INDEX TERM: 1304-76-3, Bismuth oxide (Bi<sub>2</sub>O<sub>3</sub>), uses  
 ROLE: MOA (Modifier or additive use); USES (Uses)  
 (properties of barium cobalt copper zinc hexaferrites sintered at low temps.)  
 INDEX TERM: 379268-81-2DP, Barium cobalt copper iron zinc oxide (Ba<sub>3</sub>Co<sub>1.4</sub>Cu<sub>0.2</sub>Fe<sub>23</sub>Zn<sub>0.4</sub>O<sub>41</sub>), iron-deficient  
 379268-82-3DP, Barium cobalt copper iron zinc oxide (Ba<sub>3</sub>Co<sub>1.4</sub>Cu<sub>0.4</sub>Fe<sub>23</sub>Zn<sub>0.2</sub>O<sub>41</sub>), iron-deficient  
 ROLE: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
 (properties of barium cobalt copper zinc hexaferrites sintered at low temps.)  
 INDEX TERM: 513-77-9, Barium carbonate (BaCO<sub>3</sub>) 1308-06-1, Cobalt oxide (Co<sub>3</sub>O<sub>4</sub>) 1309-37-1, Ferric oxide, reactions 1314-13-2, Zinc oxide (ZnO), reactions 1317-38-0, Cupric oxide, reactions  
 ROLE: RCT (Reactant); RACT (Reactant or reagent)  
 (properties of barium cobalt copper zinc hexaferrites sintered at low temps.)  
 REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD.  
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